

**Notice of Allowability**

Application No.

10/761,543

Examiner

Todd Ingberg

Applicant(s)

HANDAL, THOMAS

Art Unit

2193

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 12/5/2005.
2. ☒ The allowed claim(s) is/are 1-21.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

**TODD INGBERG**  
**PRIMARY EXAMINER**

## REASONS FOR ALLOWANCE

1. The following is an examiner's statement of reasons for allowance:

Independent claims 1 and 11 are represented by independent claim 1 presented below.

Prior art of record failed to teach the combination of limitations of a retargetable kernel where kernel is adapted on a target system. The compiled kernel corresponds to another kernel version different from the target system. Where an analyzer extracts the required information and performs an error check and kernel version identification step. And inserting the resulting parameters to replace a version identification in the compiled kernel module.

Prior art of record of Andrew Tenenbaum "Distributed Operating Systems", teaches on pages 457 – 458 teaches the V Kernel a Stanford University distributed Operating System Kernel. The teaching is silent as to the mechanisms of retargeting the Kernel.

Retargeting Machine code (MCODE) is taught by Sun Microsystems article "Clarity Mcode: A Retargeting Intermediate Representation for Compilation". The article is directed toward and intermediate representation not a "compiled Kernel". And the intermediate representations are to code to be compiled. the stage of the software build process taught by the Sun article is too early in the translation process from code to an executable. The claimed invention modifies the executable.

### Claim 1

A kernel module modification apparatus stored on a computer readable medium and operable to be executed on a computer for adapting for a kernel on a target system a compiled kernel module corresponding to another kernel version which is different from the kernel on the target system, comprising:

- a kernel analyzer adapted to extract from the kernel on the target system an error check measure and a kernel version identification; and

- a module adaptation component adapted to insert in the compiled kernel module an error check parameter corresponding to the error check measure extracted by the kernel analyzer from the kernel on the target system, and to replace a version identification in the compiled kernel module with the kernel version identification extracted by the kernel analyzer from the kernel on the target system.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Correspondence Information***

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Todd Ingberg whose telephone number is (571) 272-3723. The examiner can normally be reached on during the work week..

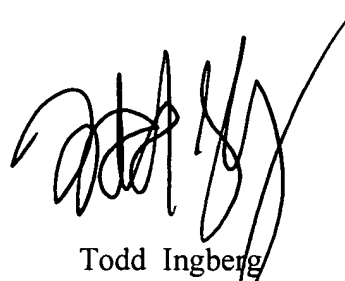
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki can be reached on (571) 272-3719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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A handwritten signature in black ink, appearing to read 'Todd Ingberg', with a long, sweeping horizontal stroke extending to the right.

Todd Ingberg  
Primary Examiner  
Art Unit 2193

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